ALLFETT®

CENTRAL LUBRICATION SYSTEMS & EQUIPMENT

ALL-5 DC - Standard type

ALL-5 DC - By-Pass type

ELECTRICAL GREASE PUMP

INTRODUCTION AND USER MANUAL

VERSION 2.00

INTRODUCTION

All industrial machinery, equipments and vehicles are working under abrasive operating conditions. The wear between frictional parts become the most highest level at these conditions. Machinery expose bad weather, dust, dirt, rain, snow and heavy weight in most cases. Consequently unwanted breakdowns occur and by that way productivity loss is inevitable.

Using automatic lubrication system only increase your profitability. ALLFETT completely take over the work load spend on lubrication with a system which is bringing togather a pump, control unit, distributors, tubes and couplings. Lubrication work is done by ALLFETT centralized lubrication systems in efficient time of machinery or vehicle which is while operating.

Lubrication is important for all frictional parts but using correct lubrication system and method only protect parts from wearing for a long time. Feeding lubrication points with correct dosage of lubricant at certain intervals while machinery is operating, provides lubricant film in place longer between parts. By ALLFETT lubrication systems life time of parts on your machinery and vehicles will be increased.

ABOUT MANUFACTURER

With over 25 years experience of manufacturing Centralized Lubrication Systems ALLFETT is able to provide a wide professional approach to select the correct Centralized Lubrication System for industry and heavy machinery.

A highly accurate manufacturing process is involved in producing Centralized Lubrication Systems in order that systems meet the very tight quality procedures and state of the art processes are employed. ALLFETT is among the few companies whose products meet the exact technical and quality standards for a correct central lubrication. We present our high quality and advanced product design concept to our worldwide costumers through our strong brand.

ALLFETT creates new opportunities and innovative solutions. As a result of the satisfaction of our customers with our good quality lubrication systems we are continuing in growing in the local and international market and became one of the successful companies in the field.

WARNINGS

Symbols and words shown below are meant to warn a particular risk to persons, material assets, or the environment. Please carefuly read this manual before installing. Failure to follow the instructions and safety precautions in this manual could result in serious injury or property damage.

Caution

Notice

Electricity

Prohobition

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PRODUCT DESCRIPTION

ALL-5 DC electrical grease pumps are manufactured only for lubrication purpose. Pump displacement is varius to provide required lubrication needs. Pump system doesn't have lubricant reservoir. 16 and 20 liters grease buckets and also 180 liters grease barrels can be used as reservoir. Pump system can be manufactured for diferent bucket or barrel volume type.

ALL-5 DC pumps has 3 different type grease pistons. Each piston delivers different amount of grese to pump outlet. Also outlet pressure is variable.

Pump working principle is also variable to provide different requirements. ALL-5 DC standard type pumps are controlled with pressure switch. ALL-5 DC pumps can also work with by-pass system.

GENERAL SPECIFICATIONS

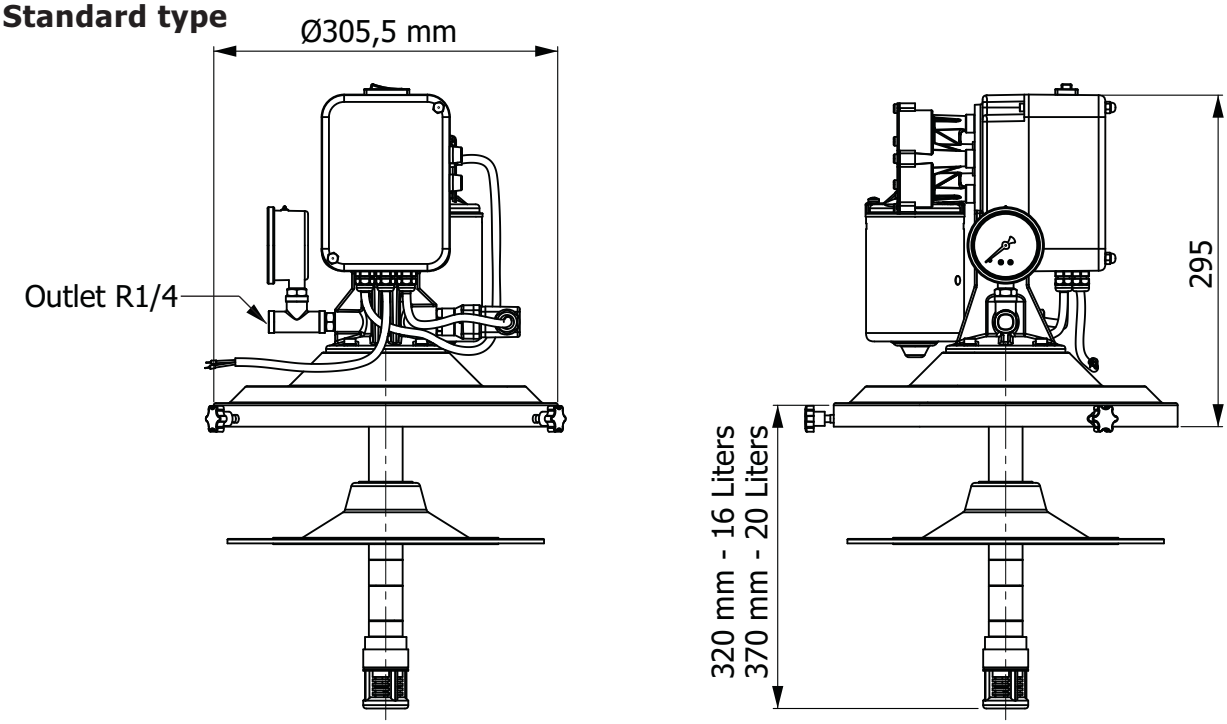
Motor type	:	24 V DC
Working pressure / Max. pressure	:	**(Ø12 piston)** 350 bar. / 400 bar. **(Ø16 piston)** 250 bar. / 300 bar. **(Ø20 piston)** 200 bar. / 150 bar.
Motor protection class	:	IP 54
Grease type	:	**NLGI 0** (-10°C) - (0°C) **NLGI 1** (0°C) - (10°C) **NLGI 2** (10°C) - (30°C)
Working temperature	:	-25°C +80°C
Pump outlet	:	1 outlet
Pump outlet thread	:	R 1/4
Pump outlet displacement	:	**(Ø12)** 140 cm³ / minute **(Ø16)** 250 cm³ / minute **(Ø20)** 390 cm³ / minute
Electrical cable length	:	5 meters - standard
Outlet tube (OPTIONAL)	:	Max. 5 meters long tube should be used. Connection couplings ordered separatelly.

ALL-1 pums are manufactured only lubrication purpose. It is not convenient to run these pumps more than 2 hours continuously.

DIMENSIONS OF BUCKET TYPE PUMP

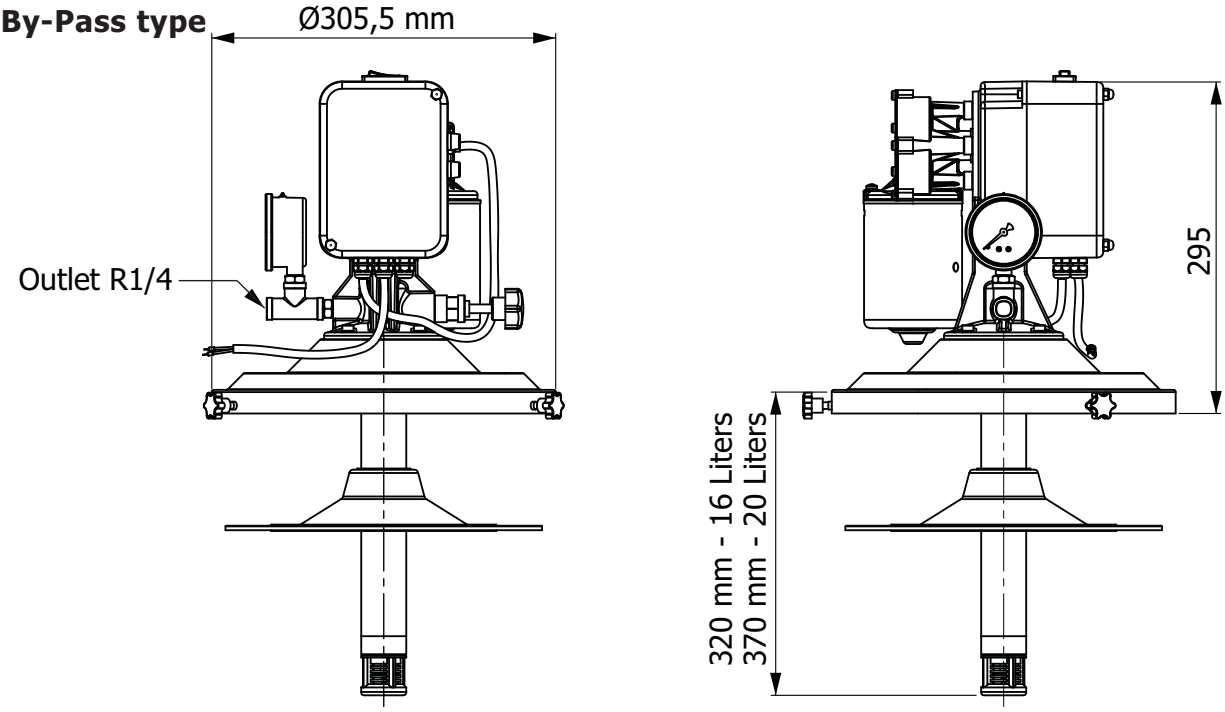
Drawings in this page represents the ALL-5 DC pumps which is used with grease buckets. 16 and 20 liters bucket type pumps has 2 different height values. There is no diversity between standard and by-pass type pumps.

Standard type



ALL-5 type pumps can be produced for different bucket volumes.

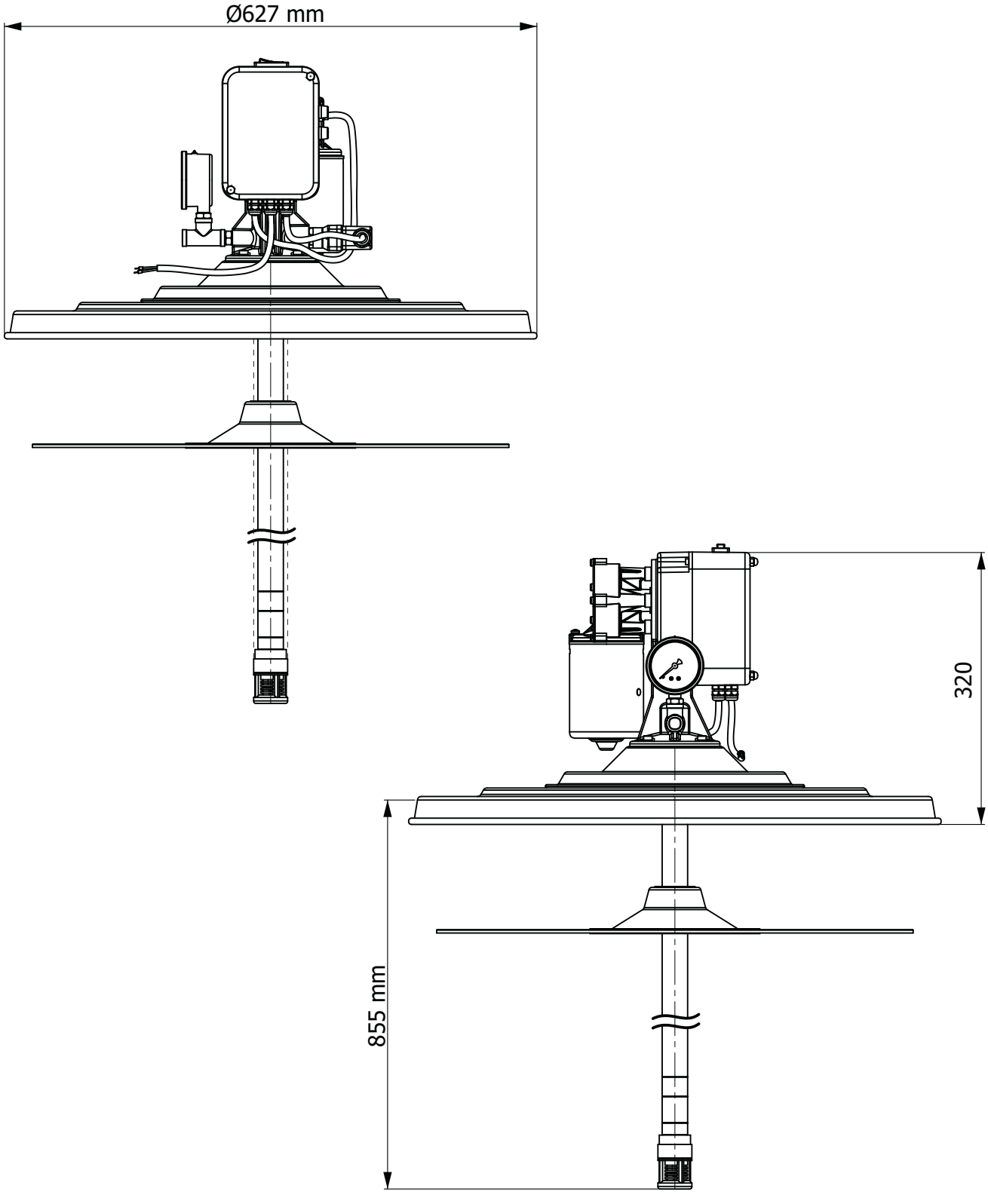
By-Pass type



DIMENSIONS OF BARREL TYPE PUMP

Drawings in this page represents the ALL-5 DC pumps which is used with grease buckets. 180 liters barrel type pumps. There is no diversity between standard and by-pass type pumps.

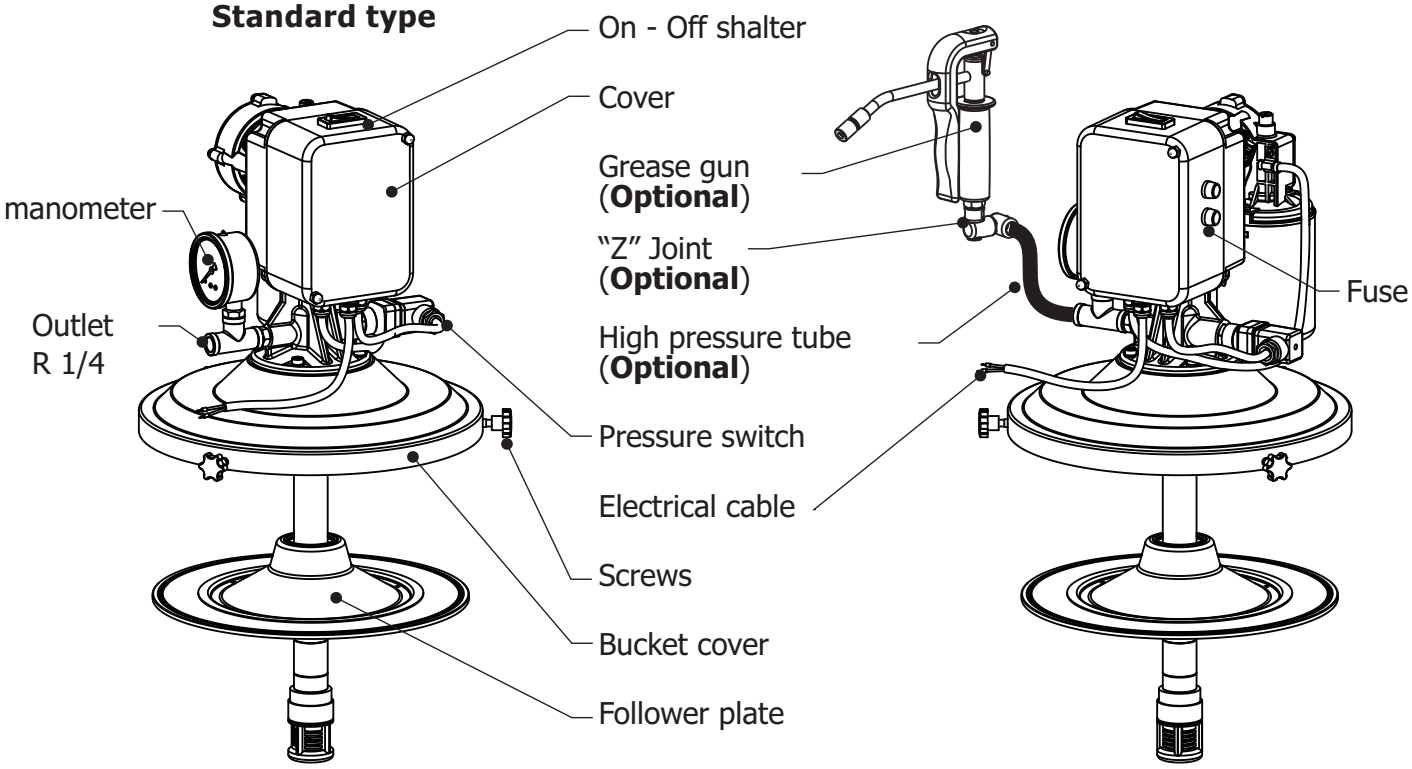
Standart tip



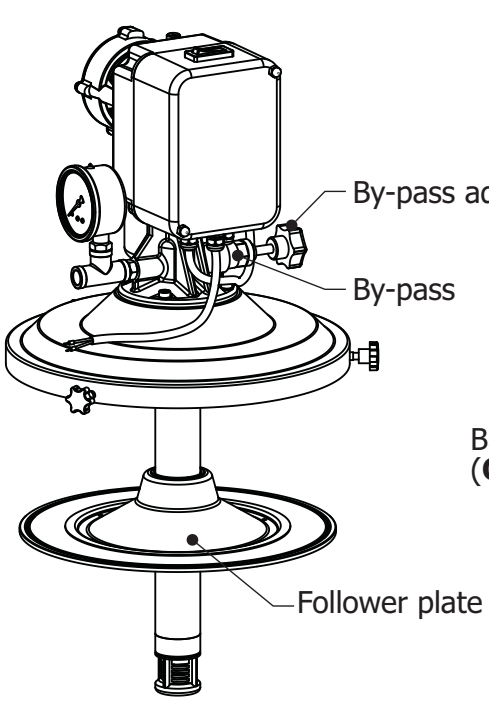
PRODUCT COMPONENTS

Technical drawings below represents the ALL-5 DC pump's sub models. Optional specifications described seperately.

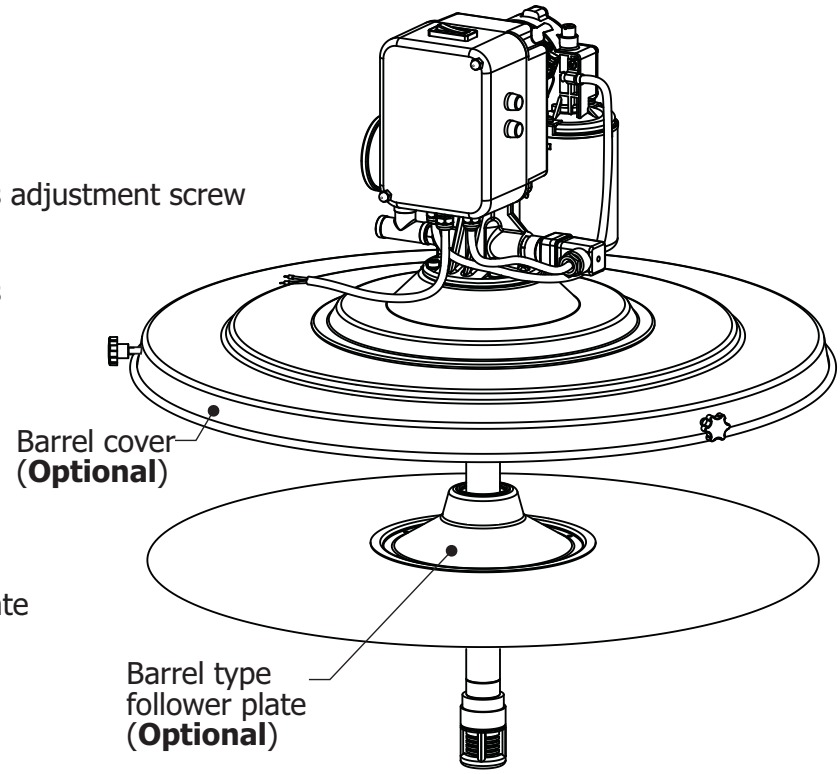
Standard type



By-pass type



Barrel type



FUNCTIONAL DESCRIPTION

Along with " DC " voltage electrical energy connected to ALL-5 pump ;

Pump starts to operate by turning On-off switch to on position. After starting the pump, grease piston vacuums the lubricant. Rotational movement of the eccentric pushes grease piston so that the lubricant vacoomed before is sended to pump outlet with pressure.

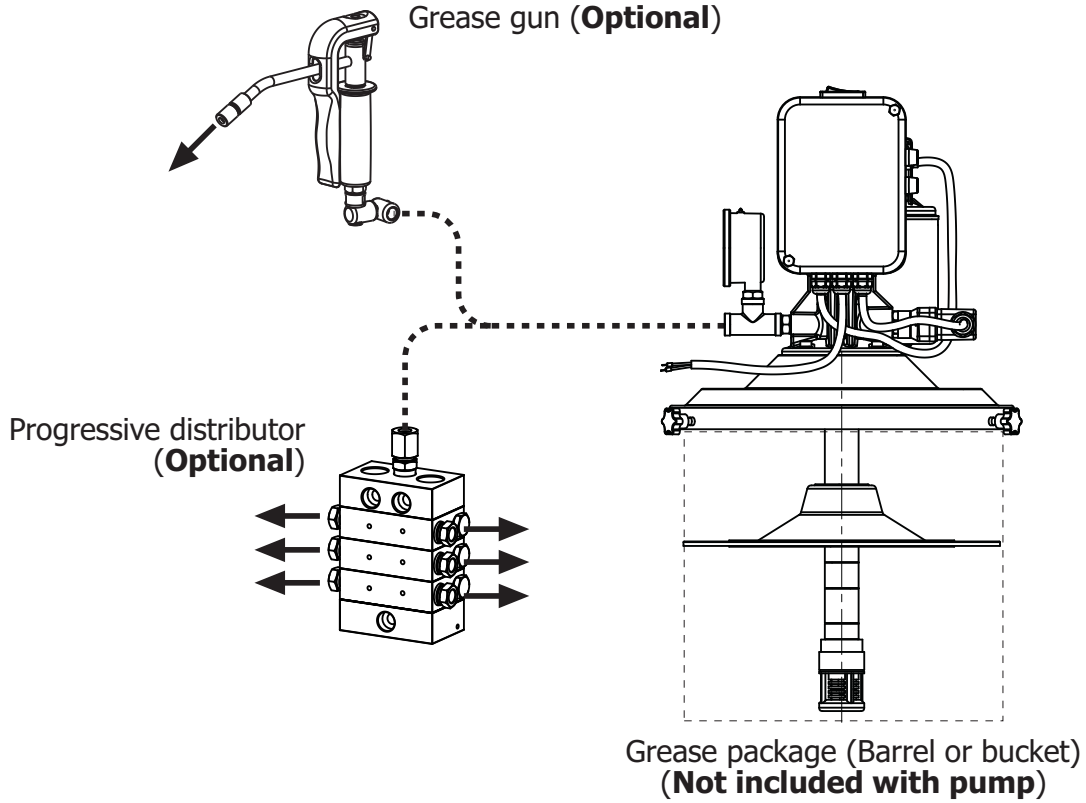
Standard type ALL-5 DC models has pressure switch to control working pressure of the pump. If lubrication point is blocked or back pressure is higher than working pressure, pressure switch will stops the pump.

By-pass type ALL-5 DC models has pressure relief system to control working pressure of the pump. If lubrication point is blocked or back pressure is higher than working pressure, by-pass system opens the port inside reservoir to over pressure goes back inside. Pump will continue to operate untill on-off swich is turned off.

Displacement volume of the pump element can be connected to single lubrication point. However displacement volume can also be divided by progressive distributor to feed multiple lubrication points.

Optional system control units ;

Lubrication system and its components can be controlled and monitored with integrated electronic control cards. Digital sensores and also pressure switches where placed on system components send information to control card.



Grease gun or progressive distributors are sold separatelly.

LUBRICANT INFORMATION

Lubricant specifications can be used with ALL-5 pumps are described below. Before using the pump please read carefuly these informations.

ALL-5 electrical grease pumps use standard grease buckets or barrels as a reservoir. This buckets or barrels should be supplied separatelly.

Grease packing (bucket or barrel) must be changed when empty with new one. Do not refill the packing.

Lubricant type can be used with pump - GREASE

NLGI classes can be used with ALL-5 pumps are described below. Because of the flow characteristics of grease the NLGI class range should be changed at different weather conditions and also temperature differencies.

for **NLGI 0** grease recomended working temperature is between -10°C and 0°C

for **NLGI 1** grease recomended working temperature is between 0°C and 10°C

for **NLGI 2** grease recomended working temperature is between 10°C and 30°C

Lubricant will be used in the system must certainly be clean and any foreign materials must not enter while filling.

Only LITHIUM based and EP additive liquid greases must be used with in system.

It is important that the grease will be used must resistant to high pressure. Make sure the liquid grease you are using is EP additive.

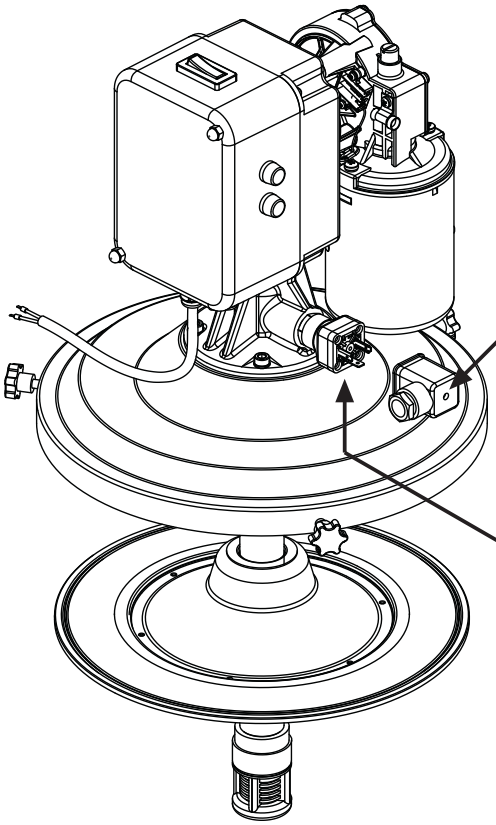
To remind that lubricants has content which may hazardous to environment. It is important that the county specific regulations and laws on the use and disposal of lubricants must be observed.

ALL-5 pumps are designed to use with in centralized lubrication systems only. It is not suitable to use ALL-5 pump for lubricant tranfering or circulation purpose.

Do not use rubber based grease in system.
Do not use grease types with graphite in system.

STANDARD TYPE PUMP DESCRIPTION

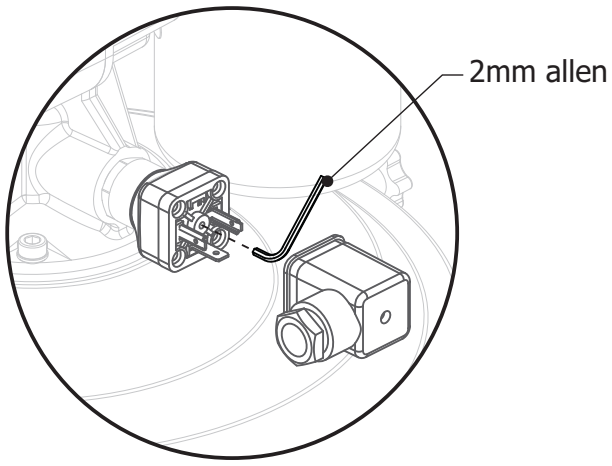
ALL-5 standard type pump works with pressure switch. Pressure switch limits the pumps working pressure. Factory default working pressure limits are described below with piston diameters. If necessary, pressure switch limit pressure can be adjusted to different value. Please follow the steps below to re-adjust pressure value.

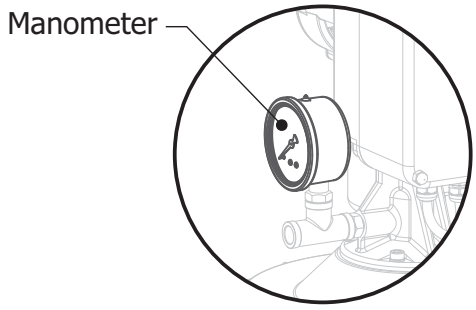


Working pressure (Ø12 piston) 350 bar.
(Ø16 piston) 250 bar.
(Ø20 piston) 200 bar.

STEP -1
Remove the female socket part.
Use small screwdriver to loose its screw.

STEP -2
There is a hole center of male socket part.
2mm allen will be used to adjust pressure.





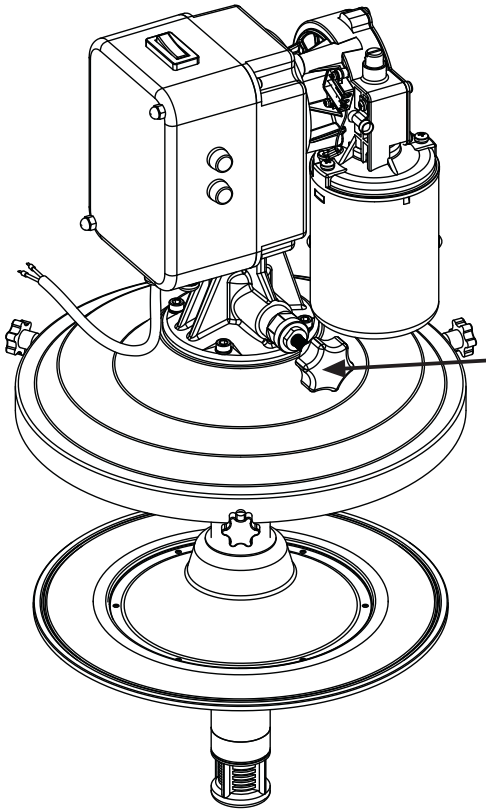
Turn allen to set recomended limit pressure.
- CW (clockwise) to increase pressure
- CCW (counter clockwise) to decrease pressure

Adjusted pressure value can be controlled
by manometer on pump outlet.

ALLFETT Pressure switch is "NO" (normally open) contact type.

BY-PASS TYPE PUMP DESCRIPTION

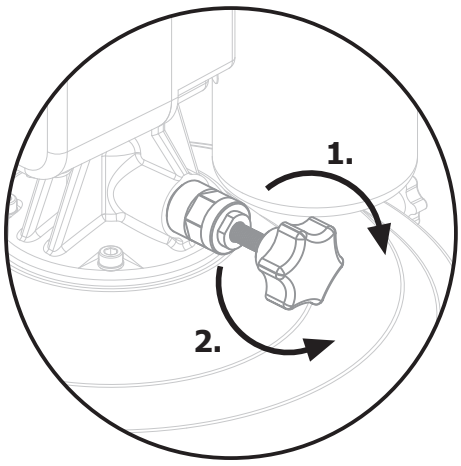
ALL-5 Pumps by-pass system is a security relief system that protects pump and lines from over pressure. Working pressure of the pump is adjusted with by-pass system. Factory default working pressure limits are described below with piston diameters. If necessary, by-pass limit pressure can be adjusted to different value. Please follow the steps below to re-adjust pressure value.

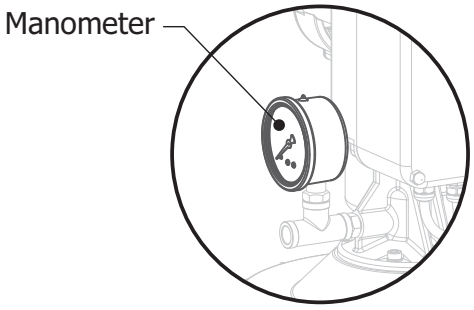


Working pressure (Ø12 piston) 350 bar.
(Ø16 piston) 250 bar.
(Ø20 piston) 200 bar.

Increase pressure
By-pass adjustment screw,
- turned CW (clockwise) to increase pressure

Decrease pressure
By-pass adjustment screw,
- turned CCW (counter clockwise) to decrease pressure

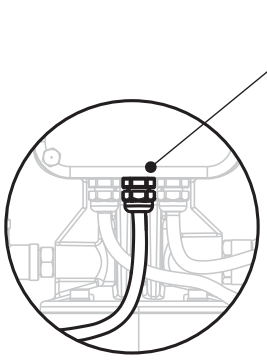




Adjusted pressure value can be controlled by manometer on pump outlet.

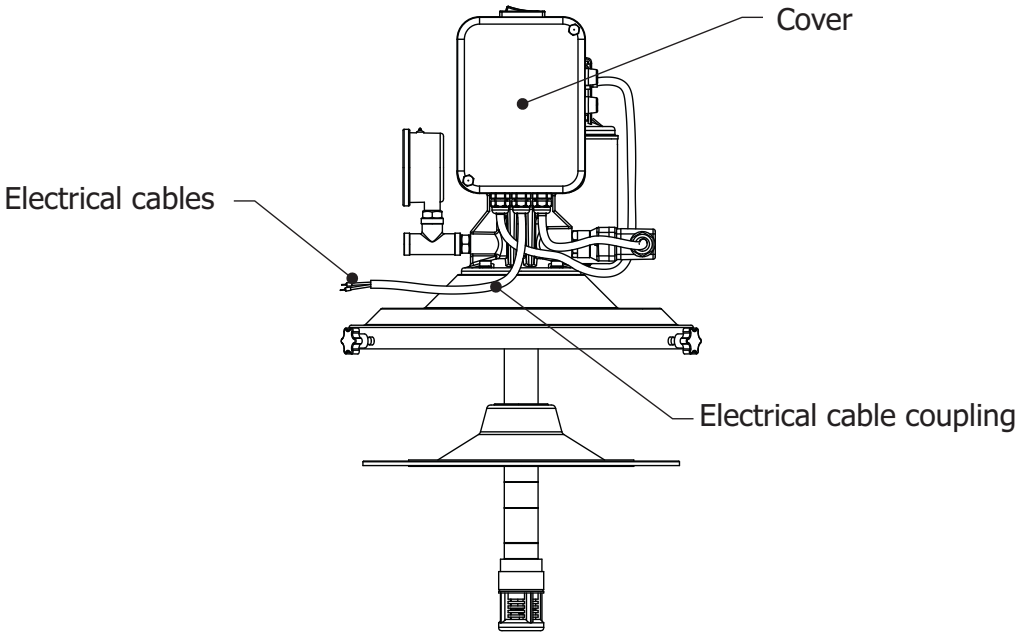
ELECTRICAL CONNECTION INSTRUCTIONS

ALL-5 standard and by-pass type pump series electrical connection principle is same. Please follow the instructions below to make connections.



1. Electrical cables are placed into electrical coupling under cover.

2. ALL-5 DC pumps driven by 24 V DC electrical motor. Correct electrical energy should be connected.



3. Electrical cables are marked with (+) and (-) signs. 24 V DC electrical energy should be connected as it.

Any maintenance on ALL-1 pumps under electrical voltage could lead to personal injury. Disconnect all electrical power before any maintenance .

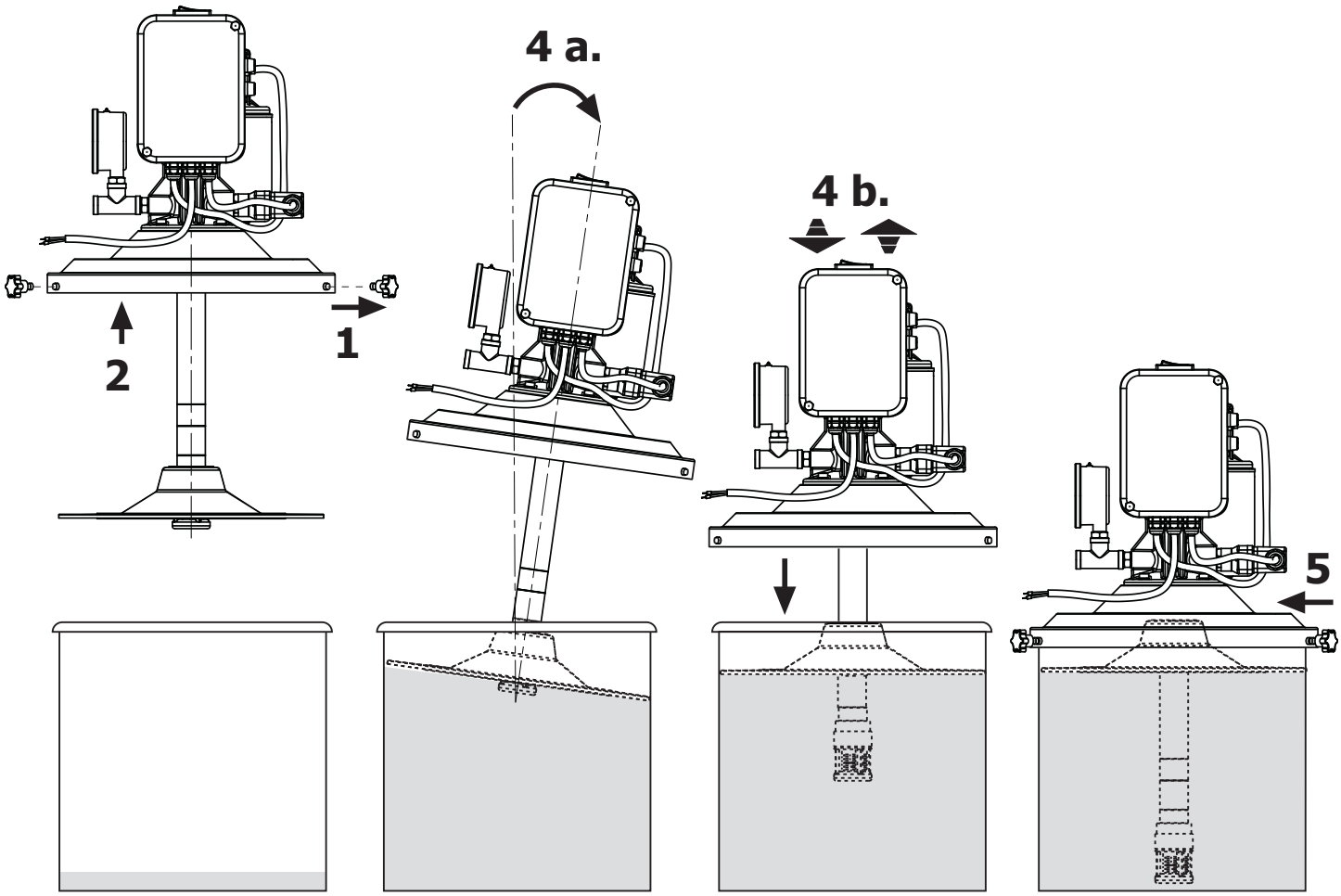
Unouthorized modifications to the units and the use of unouthorized spare parts and aids prohobited also disqualify the warranty.

BUCKET / BARREL CHANGE INSTRUCTIONS

ALL-5 pumps doesn't have reservoir. 16 or 20 liters standard grease buckets or barrels are used as reservoir. To avoid contamination of lubricant and trouble free usage, grease bucket or barrel must be changed with new one when its empty. Follow the instructions below to change

1. Remove screws from cover.
2. Lift up the pump from bucket carefully by holding pump from cover.
3. Open grease bucket cover to ready to place pump.
4. **a.** Place the pump angled into buckets top as shown in schema below.
   b. Put the pump complatelly vertical position to bucket. Then push cover to down while moving pump forward and backward slowly. This movement avoids the pump take air.
5. Tighten the cover screws again.

Pump is now ready to operate.



Bucket and barrel changing procedures are same. Pump should placed into grease without taking air.

RULES TO COMPLY WHILE USING AND WARRANTY CONDITIONS

1. Damages occur while additional transports after delivering the goods from ALLFETT to the customer DISQUALIFIES THE WARANTY.

2. Pumps are produced to lubrication purpose only and are not convenient to work more than 2 hours continuously. Working under maximum pressure more than 2 hours will harm the system. Damages occur from this reason DISQUALIFIES THE WARANTY.

3. Washing of the pump with pressured water causes damage. Any damage occur from this reason DISQUALIFIES THE WARANTY.

4. Pumps have an electric driven motor. Electrical lines must be connected properly by qualified and instructed personel.

5. All electrical connections and lines must be checked regularly for damage and to ensure that they are firmly in place.

6. Damages coming from voltage fluctuation, wrong electricity installation, connecting wrong voltage to product DISQUALIFIES THE WARANTY.

7. Keeping an uncovered cable(s) during system assembly may cause fatal damages where high voltage is transformed to low voltage. Lines must be connected properly to prevent personal injury and damage to property.

8. Transformer is necessary if there is no " 24 V DC " electrical source. Use minimum 30A current transformer.

9. Only proper NLGI class lubricants must be used with in system. NLGI class must be changed according to weather conditions. Use NLGI 0 for cold weather, increase the NLGI class up to 3 towards hot weathers.

10. Only LITHIUM based and EP additive lubricants must be used with in system.

11. Rubber based lubricant types must not be used in the system. Damages or faults occur from this reason DISQUALIFIES THE WARANTY.

12. Lubricant will be used in the system must certainly be clean and any foreign materials must not enter while changing grease bucket or barrel.

13. Any foreign materials, dirt or small particules lead to system units failing and possibly property damage to equipments. Damages or faults occur from this reason DISQUALIFIES THE WARANTY.

14. Disassembling or loosing any part while pump working is prohibited. Any damage coming from this reason DISQUALIFIES THE WARANTY. Also any personal injury occur from this reason ALLFETT does not accept responsibility.

15. Another goal of Centralized Lubrication Systems is to protect environment. So it is adviced to fill grease to the systems by mobile or hand pumps.

16. Unouthorized modifications to the units and the use of unouthorized spare parts and aids prohobited and DISQUALIFIES THE WARANTY. Only maintenance may apply descibed in PAGE 14 - 15. ALLFETT Technical Service must be informed to any other possible troubles and necessary procedures must be performed.

17. ALLFETT Mekanik ve Elektronik Sistemler SAN. TIC. LTD. STI and ALLFETT Pazarlama ve Dis Ticaret LTD. STI. does not accept responsibility for damages described in items above on equipments which ALLFETT systems are installed.

PUMP MAINTENANCE

1. IF PUMP NOT STARTS

a. Electrical connections of the pump may be loosen or broken. Check the electrical cables and connections of the system according to schemas on page 11.

b. Connected electricity to pump may different then " DC " voltage. Connect the electricity 24 V DC

c. Connected electericity may be converted to "DC" voltage from "AC" voltage by a transformer.

Transformer must be minimum 30A current.

d. Pump is standard type and connected lubrication point is blocked ;

Standard type ALL-5 pumps work with pressure switch. Pressure switch is adjusted to 200 bars limit pressure to stop the pump. If lubrication point is blocked, then pressure rise up and reaches to limit pressure. Remove the blockage of the lubrication point.

e. If ALLFETT electronic control card is connected the system ;

Electronic control card may be in waiting period. Wait until working time starts.
If necessary control card pass to working period by pressing **ADDITIONAL CYCLE** button.

2. IF PUMP NOT SENDING GREASE

a. Grease inside bucket or barrel is empty.
Chance the grease bucket or barrel according to items in page 16.

b. Pump may take air due to work without grease ;

To take air out from pump system, remove the outlet coupling. Start the pump and continue to operate pump until grease without air coming from outlet. If grease is coming without air, stop the pump and put the outlet coupling again.

If no grease is coming from outlet or grease with air continue to come from outlet for long time ;

Please follof the steps on page 12. to re-place pump again the bucket or barrel.

Unouthorized modifications to the units and the use of unouthorized spare parts and aids prohobited also disqualify the warranty.

TECHNICAL SERVICE

ALLFETT MEKANİK VE ELEKTRONİK SİSTEMLER SAN. VE TİC. LTD. ŞTİ.
Yeni Eyüp Bulvarı, Topçular Caddesi, Set Üstü, No:1 Demirkapı-Rami / İstanbul
Telefon: 0 212 501 32 01 (PBX) www.allfett.net
Fax : 0 212 501 33 37 info@allfett.net

ORDER INFORMATION

Product name	Order number
ALL-5 Bucket type / By-pass system / 24 V DC / Ø12	**11 24 16 B1**
ALL-5 Bucket type / By-pass system / 24 V DC / Ø16	**11 24 16 B2**
ALL-5 Bucket type / By-pass system / 24 V DC / Ø20	**11 24 16 B3**
ALL-5 Bucket type / Pressure switch / 24 V DC / Ø12	**10 24 16 E1**
ALL-5 Bucket type / Pressure switch / 24 V DC / Ø16	**10 24 16 E2**
ALL-5 Bucket type / Pressure switch / 24 V DC / Ø20	**10 24 16 E3**
ALL-5 Barrel type / By-pass system / 24 V DC / Ø12	**11 24 20 B1**
ALL-5 Barrel type / By-pass system / 24 V DC / Ø16	**11 24 20 B2**
ALL-5 Barrel type / By-pass system / 24 V DC / Ø20	**11 24 20 B3**
ALL-5 Barrel type / Pressure switch / 24 V DC / Ø12	**10 24 20 E1**
ALL-5 Barrel type / Pressure switch / 24 V DC / Ø16	**10 24 20 E2**
ALL-5 Barrel type / Pressure switch / 24 V DC / Ø20	**10 24 20 E3**

OPTIONAL COMPONENTS

Product name	Order number
High pressure tube - Ø11,3xØ6,35 - 840 bar.	**51 00 05 05**
Barrel type follover plate	**20 00 20 00**
Barrel cover	**10 0687**
Grease gun	**10 GT 00 00**
"Z" Joint	**10 ZM 00 00**

SALES

ALLFETT PAZARLAMA VE DIŞ TİCARET LTD. ŞTİ.
Yeni Eyüp Bulvarı, Topçular Caddesi, Set Üstü, No:1 Demirkapı-Rami / İstanbul
Telefon : 0 212 501 32 01 (PBX) www.allfett.net
Fax : 0 212 501 33 37 info@allfett.net

WARRANTY

Utilisation of this warranty certificate has been permitted by The Republic of Turkey, The Ministry of Industrial and Commerce, The general Administration of Protection of Consumer Right and Competition, in accordance with the law numbered 4077 .

PRODUCER COMPANY

NAME	: ALLFETT Mekanik ve Elektronik Sistemler San. ve Tic. Ltd. Şti.
CENTRAL ADRESS	: Yeni Eyup Bulvari, Topcular Cad. Set Ustu, No:1 Demirkapı-Rami / İstanbul
TELEPHONE	: 0212 501 32 01 (PBX)
FAX	: 0212 501 33 37

AUTHORISED PERSON

SIGNATURE - STAMP : :

PRODUCT

TYPE	:	Electrical grease pump
BRAND	:	ALLFETT
MODEL	:	ALL-5 Standard ☐
		ALL-5 With by-pass ☐
SERIAL NUMBER	:	.....
DELIVERY DATE / PLACE	:	.....
WARRANTY	:	2 years
REPAIR TIME	:	30 days

SALER COMPANY

NAME	:	.....
CENTRAL ADRESS	:	.....
TELEPHONE	:	.....
FAX	:	.....
BILL DATE / NUMBER	:	.....

DANGEROUS OR HARMFUL CONDITIONS TO ENVIRONMENTAL AND HUMAN HEALTH DURING USE

All ALLFETT systems are producing according to relevant provisions of security regulations. There is no risk for environmental and human health during use.

TRANSPORT AND STORAGE

There are no restrictions on transportation by land, air and sea. In general, products should be stored in a dry and dust-free environment. The storage temperatures are between -10°C and +40°C.

All products are packed with paper based support matarial to reduce damage. Upon receiving the package please check the items for possible damage.

QUALITY SYSTEM

ISO 9001
BUREAU VERITAS Certification

This product is produced by **ALLFETT Mekanik ve Elektronik Sistemler San. Tic. Ltd. Sti.** company, which, is certificated by Bureau Veritas with certificate to compatible for ISO 9001:2008 standard and owner of the quality management system.

WARRANTY CONDITIONS

1. The warranty period is two years from the date of delivery.

2. The product including all its components is under the warranty of our company.

3. In case of defects within the warranty period the period spent in repairing is added to the warranty period. The repairing period is maximum 30 days. This period starts from the date of delivery of the product to the services centers or to the seller, the agency the representative, the importer or the manufacturer of the product respectively, in case there are service centers.

4. In case the product has material, workmanship or manufacturing defects, the product will be repaired free of charge and expenses of any sort including labor, the value of the parts replaced or any our charges.

5. The product will be replaced free of charge;

- If the product permanently disfunctions due to repeating the same defect more than four times within the warranty period
- If the maximum period for repairing is exceeded.
- If it is determined that the defect cannot be repaired by report written by the service, or in the absence of service centers, by the seller, agency, representative, importer or manufacturer of the product respectively.

6. The present warranty does not cover damages resulting from importer handling by deviating from the instructions in the manual.

7. General administration of protection of consumer rights and competition in the ministry of industry and commorce may be applied for problems concerning the warranty certificate.

ALLFETT®

CENTRAL LUBRICATION SYSTEMS & EQUIPMENT

ALLFETT MEKANİK VE ELEKTRONİK SİSTEMLER SAN. VE TİC. LTD. ŞTİ.
Topçular Mahallesi, Topçular Caddesi No:1/1 - Eyüp / İstanbul
Telefon : 0 212 501 32 01 (PBX) www.allfett.net
Fax : 0 212 501 33 37 info@allfett.net